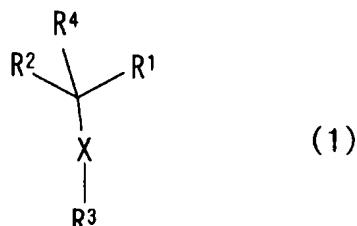


IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A compound represented by ~~the following~~ formula (1):

[Chemical formula 1]



(~~wherein~~, wherein,

R^1 and R^3 each independently represents an aromatic hydrocarbon group which may have a substituent or an aromatic heterocyclic group which may have a substituent,

R^2 represents a saturated or unsaturated monocyclic heterocyclic group or unsaturated polycyclic heterocyclic group which may have a substituent,

R^4 represents a hydrogen atom or a C_{1-6} alkyl group,

X represents $-S-$, $-SO-$ or $\underline{-SO_2-} \underline{-SO_2-}$;

an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 2 (Currently Amended): A compound according to Claim 1, ~~wherein R^1 and R^3 each independently~~ represents a phenyl group which may have a substituent; an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 3 (Original): A compound according to Claim 1, ~~wherein R^1 and R^3 each independently~~ represents an aromatic hydrocarbon group or aromatic heterocyclic group which may have 1 to 3 substituents selected from halogen atoms, C_{1-6} alkyl groups, trihalogenomethyl groups, C_{1-6} alkoxy groups, formyl group, C_{2-6} alkanoyl groups, carboxyl group, carboxyamino C_{1-6} alkyl groups, C_{1-6} alkoxy carbonylamino C_{1-6} alkyl groups, oxo group, nitro group, cyano

group, amidino group, C₂₋₆ alkenyloxy groups, hydroxy group, thioxo group, amino group, C₁₋₆ alkylamino groups, di(C₁₋₆ alkyl)amino groups, C₁₋₆ alkoxycarbonyl groups, carbamoyl group, C₁₋₆ alkylcarbamoyl groups, di(C₁₋₆ alkyl)carbamoyl groups, thiocarbamoyl group, C₁₋₆ alkylthiocarbamoyl groups, di(C₁₋₆ alkyl)thiocarbamoyl groups, mercapto group, C₁₋₆ alkylthio groups, C₁₋₆ alkylsulfinyl groups and C₁₋₆ alkylsulfonyl groups; an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 4 (Currently Amended): A compound according to Claim 1, wherein R¹ and R³ each independently represents a phenyl group which may have 1 to 3 substituents selected from halogen atoms, C₁₋₆ alkyl groups, trihalogenomethyl groups, C₁₋₆ alkoxy groups, formyl group, C₂₋₆ alkanoyl groups, carboxyl group, carboxyamino C₁₋₆ alkyl groups, C₁₋₆ alkoxycarbonylamino C₁₋₆ alkyl groups, oxo group, nitro group, cyano group, amidino group, C₂₋₆ alkenyloxy groups, hydroxy group, thioxo group, amino group, C₁₋₆ alkylamino groups, di(C₁₋₆ alkyl)amino groups, C₁₋₆ alkoxycarbonyl groups, carbamoyl group, C₁₋₆ alkylcarbamoyl groups, di(C₁₋₆ alkyl)carbamoyl groups, thiocarbamoyl group, C₁₋₆ alkylthiocarbamoyl groups, di(C₁₋₆ alkyl)thiocarbamoyl groups, mercapto group, C₁₋₆ alkylthio groups, C₁₋₆ alkylsulfinyl groups and C₁₋₆ alkylsulfonyl groups; an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 5 (Currently Amended): A compound according to ~~any one of Claims 1 to 4~~ Claim 1, wherein R² represents a pyridyl group which may have a substituent; an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 6 (Canceled):

Claim 7 (Original): A compound according to Claim 5, wherein R² represents a pyridyl group which may be substituted with 1 to 3 substituents selected from halogen atoms, cyano group, C₁₋₆ alkyl groups, hydroxy group, C₁₋₆ alkoxy groups, C₂₋₆ alkenyloxy groups, carboxy C₁₋₆ alkyl groups, C₁₋₆ alkoxycarbonyl C₁₋₆ alkyl groups, heterocycle-carbonyl C₁₋₆ alkyl groups, hydroxy C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-sulfonyl C₁₋₆ alkyl groups, N,N-di(C₁₋₆ alkyl)aminosulfonyl C₁₋₆ alkyl groups, heterocycle-C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-thio C₁₋₆ alkyl groups, azido-C₁₋₆ alkyl groups, amino C₁₋₆ alkyl groups, C₁₋₆ alkylamino C₁₋₆ alkyl groups, di(C₁₋₆ alkyl)amino C₁₋₆ alkyl groups, hydroxy C₁₋₆ alkylamino C₁₋₆ alkyl groups, C₁₋₆ alkoxy C₁₋₆ alkylamino C₁₋₆ alkyl groups, bis(C₁₋₆ alkoxy C₁₋₆ alkyl)amino C₁₋₆ alkyl groups, (hydroxy C₁₋₆ alkyl)(C₁₋₆ alkoxy C₁₋₆ alkyl)amino C₁₋₆ alkyl groups, C₂₋₆ alkanoylamino C₁₋₆ alkyl groups, di(C₂₋₆ alkanoyl)amino C₁₋₆ alkyl groups, carboxyamino C₁₋₆ alkyl groups, di(C₁₋₆ alkylcarbonylamino C₁₋₆ alkyl)amino C₁₋₆ alkyl groups, C₁₋₆ alkoxycarbonylamino C₁₋₆ alkyl groups, di(C₁₋₆ alkoxycarbonyl)amino C₁₋₆ alkyl groups, carbamoylamino C₁₋₆ alkyl groups, N-C₁₋₆ alkylcarbamoylamino C₁₋₆ alkyl groups, N,N-di(C₁₋₆ alkyl)carbamoylamino C₁₋₆ alkyl groups, aminosulfonylamino C₁₋₆ alkyl groups, N-C₁₋₆ alkylsulfonylamino C₁₋₆ alkyl groups, di(C₁₋₆ alkyl)aminosulfonylamino C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-sulfonylamino-C₂₋₆ alkanoylamino C₁₋₆ alkyl groups, amino C₁₋₆ alkylcarbonylamino C₁₋₆ alkyl groups, N-C₁₋₆ alkylamino C₁₋₆ alkylcarbonylamino C₁₋₆ alkyl groups, N,N-di(C₁₋₆ alkyl)amino C₁₋₆ alkylcarbonylamino C₁₋₆ alkyl groups, heterocycle-C₁₋₆ alkylcarbonylamino C₁₋₆ alkyl groups, heterocycle-C₂₋₆ alkenylcarbonylamino C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-C₂₋₆ alkenylcarbonylamino C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-carbonylamino C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-thiocarbonylamino C₁₋₆ alkyl groups, heterocycle-carbonylamino C₁₋₆ alkyl groups, C₁₋₆ alkoxyoxalylamino C₁₋₆ alkyl groups, (C₆₋₁₀ aromatic hydrocarbon-sulfonyl)(C₁₋₆ alkyl)amino C₁₋₆ alkyl groups, C₁₋₆

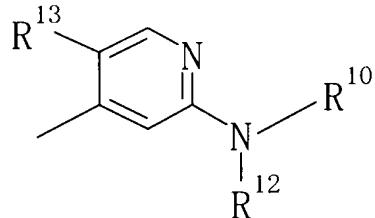
alkylsulfonylamino C₁₋₆ alkyl groups, C₁₋₆ alkylsulfonylamino C₁₋₆ alkyl groups, carbamoyloxy C₁₋₆ alkyl groups, N-C₁₋₆ alkylcarbamoyloxy C₁₋₆ alkyl groups, N,N-di(C₁₋₆ alkyl)carbamoyloxy C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-C₁₋₆ alkylcarbamoyloxy C₁₋₆ alkyl groups, C₁₋₆ alkoxy carbonyloxy-C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon-oxycarbonyloxy C₁₋₆ alkyl groups, heterocycle carbonylhydrazone methyl groups, C₆₋₁₀ aromatic hydrocarbon carbonylhydrazone methyl groups, C₂₋₆ alkenyl groups, carboxy-C₂₋₅ alkenyl groups, C₁₋₆ alkoxy carbonyl-C₂₋₆ alkenyl groups, carbamoyl C₂₋₆ alkenyl groups, heterocycle-C₂₋₆ alkenyl groups, formyl group, carboxyl group, heterocycle-carbonyl groups, C₆₋₁₀ aromatic hydrocarbon carbonyl groups, C₁₋₆ alkoxy carbonyl groups, carbamoyl group, N-C₁₋₆ alkylcarbamoyl groups, N,N-di(C₁₋₆ alkyl)carbamoyl groups, C₃₋₈ cycloalkyl-C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkylthio C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkylsulfinyl C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkylcarbamoyl groups, hydroxyaminocarbonyl group, C₁₋₆ alkoxy carbamoyl groups, hydroxy C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkoxy C₁₋₆ alkylcarbamoyl groups, amino C₁₋₆ alkylcarbamoyl groups, amino C₁₋₆ alkylthiocarbamoyl groups, hydroxy C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkoxy carbonyl C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkoxy carbonylamino C₁₋₆ alkylcarbamoyl groups, C₁₋₆ alkoxy carbonyl amino C₁₋₆ alkylthiocarbamoyl groups, heterocycle-carbamoyl groups, heterocycle-C₁₋₆ alkylcarbamoyl groups, C₆₋₁₀ aromatic hydrocarbon-carbamoyl groups, hydrazinocarbonyl groups, N-C₁₋₆ alkylhydrazinocarbonyl groups, N'-C₁₋₆ alkylhydrazinocarbonyl groups, N',N'-di(C₁₋₆ alkyl)hydrazinocarbonyl groups, N,N'-di(C₁₋₆ alkyl)hydrazinocarbonyl groups, N,N',N'-tri(C₁₋₆ alkyl)hydrazinocarbonyl groups, N'-(heterocycle-carbonyl)-hydrazinocarbonyl groups, amino group, C₁₋₆ alkoxy C₁₋₆ alkylamino groups, amino C₁₋₆ alkylamino groups, (C₁₋₆ alkylamino C₁₋₆ alkylamino groups, (C₁₋₆ alkylamino C₁₋₆ alkyl)(C₁₋₆ alkyl)amino groups, C₁₋₆ alkoxy carbonylamino C₁₋₆ alkylamino groups, di(C₁₋₆ alkyl)amino C₁₋₆ alkylamino groups, heterocycle-amino C₁₋₆ alkylamino groups, carboxyl C₁₋₆ alkylamino groups, (carboxyl C₁₋₆ alkyl)(C₁₋₆ alkyl)amino groups, heterocycle-C₁₋₆ alkylamino groups, (heterocycle-C₁₋₆ alkyl)(C₁₋₆ alkyl)amino groups, hydroxy C₁₋₆ alkylamino

groups, (hydroxy C₁₋₆ alkyl)(C₁₋₆ alkyl)amino groups, C₁₋₆ alkylthio C₁₋₆ alkylamino groups, C₁₋₆ alkylaminocarbonyloxy C₁₋₆ alkylamino groups, (C₁₋₆ alkylaminocarbonyloxy C₁₋₆ alkyl)(C₁₋₆ alkyl)amino groups, C₁₋₆ alkylsulfinyl C₁₋₆ alkylamino groups, C₁₋₆ alkylsulfonyl C₁₋₆ alkylamino groups, groups represented by the formula: -N(R¹²)SO₂R¹¹ (wherein, R¹¹ represents a C₁₋₆ alkyl group, heterocyclic group, C₁₋₆ alkyl-heterocyclic group, heterocycle-C₁₋₆ alkyl group, hydroxy C₁₋₆ alkyl group, amino C₁₋₆ alkyl group, C₁₋₆ alkylamino C₁₋₆ alkyl group, di(C₁₋₆ alkyl)amino C₁₋₆ alkyl group, carboxy C₁₋₆ alkyl group, carbamoyl C₁₋₆ alkyl group, trifluoromethyl group, difluoromethyl group, fluoromethyl group, amino group, C₁₋₆ alkylamino group or di(C₁₋₆ alkyl)amino group, R¹² represents a hydrogen atom, C₁₋₆ alkyl group, hydroxy group or amino group), hydroxy C₁₋₆ alkoxy C₁₋₆ alkylamino groups, C₆₋₁₀ aromatic hydrocarbon-C₁₋₆ alkylamino groups, heterocycle-carbonylamino groups, C₁₋₆ alkoxy carbonylamino groups, heterocycle-C₁₋₆ alkylcarbonylamino groups, C₆₋₁₀ aromatic hydrocarbon-carbonylamino groups, heterocycle-amino groups, hydroxyimino group, C₁₋₆ alkoxyimino groups, oxo group, hydroxyimino C₁₋₆ alkyl groups, C₁₋₆ alkoxy carbonyl C₁₋₆ alkylamino groups, (C₂₋₆ alkanoyl)amino C₁₋₆ alkyl groups, C₆₋₁₀ aromatic hydrocarbon groups, and heterocyclic groups (in which, the C₆₋₁₀ aromatic hydrocarbon group or heterocyclic group may be substituted with 1 to 3 substituents selected from halogen atoms, C₁₋₆ alkyl groups, C₁₋₆ alkoxy groups, C₂₋₆ alkenyl groups, formyl group, C₂₋₆ alkanoyl groups, carboxyl group, carboxyamino C₁₋₆ alkyl groups, C₁₋₆ alkoxy carbonylamino C₁₋₆ alkyl groups, oxo group, nitro group, cyano group, amidino group, C₂₋₆ alkenyloxy groups, hydroxy group, thioxo group, amino group, C₁₋₆ alkylamino groups, di(C₁₋₆ alkyl)amino groups, amino C₁₋₆ alkyl groups, C₁₋₆ alkoxy carbonyl groups, carbamoyl group, C₁₋₆ alkylcarbamoyl groups, di(C₁₋₆ alkyl)carbamoyl groups, thiocarbamoyl group, C₁₋₆ alkylthiocarbamoyl groups, di(C₁₋₆ alkyl)thiocarbamoyl groups, C₂₋₆ alkanoyl amino groups, C₂₋₆ alkanoyl(C₁₋₆ alkyl)amino groups, thio C₂₋₆ alkanoyl amino groups, thio C₂₋₆ alkanoyl(C₁₋₆ alkyl)amino groups, formylamino group, formyl(C₁₋₆ alkyl)amino groups, thioformylamino group, thioformyl(C₁₋₆ alkyl)amino groups,

C₂₋₆ alkanoyloxy groups, formyloxy group, mercapto group, C₁₋₆ alkylthio groups, C₁₋₆ alkylsulfinyl groups, C₁₋₆ alkylsulfonyl groups, aminosulfonyl group, C₁₋₆ alkylaminosulfonyl groups, di(C₁₋₆ alkyl)aminosulfonyl groups, C₁₋₆ alkylsulfonylamino groups, and C₁₋₆ alkylsulfonyl(C₁₋₆ alkyl)amino groups; an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 8 (Currently Amended): A compound according to Claim 5, wherein R² represents a group represented by the following formula:

{Chemical formula 2}



(wherein, wherein,

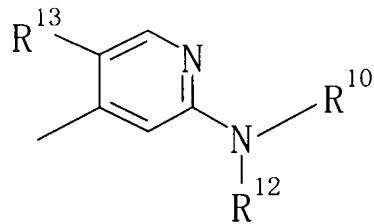
R¹⁰ represents a hydrogen atom, C₁₋₆ alkyl group, hydroxy C₁₋₆ alkyl group, C₁₋₆ alkylsulfinyl C₁₋₆ alkyl group, C₁₋₆ alkylsulfonyl C₁₋₆ alkyl group, carboxy C₁₋₆ alkyl group, heterocycle-C₁₋₆ alkyl group, or a group represented by the formula: -SO₂-R¹¹ (in which, R¹¹ represents a C₁₋₆ alkyl, heterocyclic, C₁₋₆ alkyl-heterocyclic, heterocycle-C₁₋₆ alkyl, hydroxy C₁₋₆ alkyl, amino C₁₋₆ alkyl, C₁₋₆ alkylamino C₁₋₆ alkyl, di(C₁₋₆ alkyl)amino C₁₋₆ alkyl, carboxy C₁₋₆ alkyl, carbamoyl C₁₋₆ alkyl, trifluoromethyl, difluoromethyl, fluoromethyl, amino, C₁₋₆ alkylamino or di(C₁₋₆ alkyl)amino),

R¹² represents a hydrogen atom, C₁₋₆ alkyl group, hydroxy group, or amino group, or R¹¹ and R¹² may, taken together with a sulfur atom to which R¹¹ is attached and a nitrogen atom to which R¹² is attached, form a 5- or 6-membered aliphatic heterocycle, and

R¹³ represents a C₁₋₆ alkyl group, halogen atom or cyano group); an N-oxide or S oxide thereof; a salt thereof; or a solvate thereof.

Claim 9 (Currently Amended): A compound according to Claim 5, wherein R² represents a group represented by the following formula:

{Chemical formula 3}



(wherein, wherein,

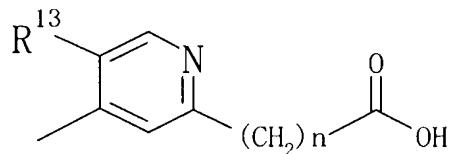
R¹⁰ represents a group represented by the formula: -SO₂-R¹¹ (in which, R¹¹ represents a C₁₋₆ alkyl, heterocyclic, C₁₋₆ alkyl-heterocyclic, heterocycle-C₁₋₆ alkyl, hydroxy C₁₋₆ alkyl, amino C₁₋₆ alkyl, C₁₋₆ alkylamino C₁₋₆ alkyl, di(C₁₋₆ alkyl)amino C₁₋₆ alkyl, carboxy C₁₋₆ alkyl, carbamoyl C₁₋₆ alkyl, trifluoromethyl, difluoromethyl, fluoromethyl, amino, C₁₋₆ alkylamino or di(C₁₋₆ alkyl)amino),

R¹² represents a hydrogen atom, C₁₋₆ alkyl group, hydroxy group or amino group, or R¹¹ and R¹² may, taken together with a sulfur atom to which R¹¹ is attached and a nitrogen atom to which R¹² is attached, form a 5- or 6-membered aliphatic heterocycle, and

R¹³ represents a C₁₋₆ alkyl group, halogen atom or cyano group); an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 10 (Currently Amended): A compound according to Claim 5, wherein R² represents a compound represented by the formula:

{Chemical formula 4}

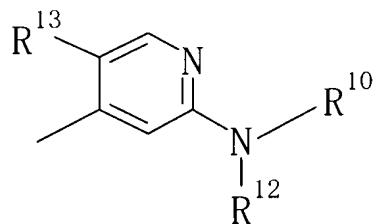


(wherein, wherein,

R^{13} represents a C_{1-6} alkyl group, halogen atom or cyano group, and n stands for an integer of from 0 to 6); an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 11 (Currently Amended): A compound according to Claim 1, wherein R¹ represents a 2,5-difluorophenyl or 2-fluoro-5-cyanophenyl group, R³ represents a 4-chlorophenyl, 4-fluorophenyl, 2,4-difluorophenyl, 3,4-difluorophenyl, 3-fluoro-4-chlorophenyl, 4-trifluoromethylphenyl, 5-chloro-2-thienyl, 5-chloro-2-pyridyl, 6-chloro-3-pyridyl, or 6-trifluoromethyl-3-pyridyl group; R² represents a group represented by the following formula:

[Chemical formula 5]



{wherein, wherein,

R^{10} represents a hydrogen atom, C₁₋₆ alkyl group, hydroxy C₁₋₆ alkyl group, C₁₋₆ alkylsulfinyl C₁₋₆ alkyl group, C₁₋₆ alkylsulfonyl C₁₋₆ alkyl group, carboxy C₁₋₆ alkyl group, heterocycle-C₁₋₆ alkyl group, or a group represented by the formula: -SO₂-R¹¹ (in which, R¹¹ represents a C₁₋₆ alkyl, heterocyclic, C₁₋₆ alkyl-heterocyclic, heterocycle-C₁₋₆ alkyl, hydroxy C₁₋₆ alkyl, amino C₁₋₆ alkyl, C₁₋₆ alkylamino C₁₋₆ alkyl, di(C₁₋₆ alkyl)amino C₁₋₆ alkyl, carboxy C₁₋₆ alkyl, carbamoyl C₁₋₆ alkyl, trifluoromethyl, difluoromethyl, fluoromethyl, amino, C₁₋₆ alkylamino, or di(C₁₋₆ alkyl)amino),

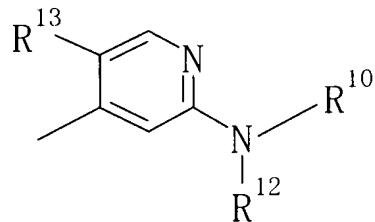
R^{12} represents a hydrogen atom, C_{1-6} alkyl group, hydroxy group, or amino group, or R^{11} and R^{12} may, taken together with a sulfur atom to which R^{11} is attached and a nitrogen atom to which R^{12} is attached, form a 5- or 6-membered aliphatic heterocycle, and

R^{13} represents a C₁₋₆ alkyl group, halogen atom or cyano group); an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 12 (Currently Amended): A compound according to Claim 1, wherein R¹ represents a 2,5-difluorophenyl or 2-fluoro-5-cyanophenyl group, R³ represents a 4-chlorophenyl, 4-fluorophenyl, 2,4-difluorophenyl, 3,4-difluorophenyl, 3-fluoro-4-chlorophenyl, 4-trifluoromethylphenyl, 5-chloro-2-thienyl, 5-chloro-2-pyridyl, 6-chloro-3-pyridyl or 6-trifluoromethyl-3-pyridyl group;

R² represents a group represented by the following formula:

[Chemical formula 6]



(wherein, wherein,

R¹⁰ represents a group represented by the formula: -SO₂-R¹¹ (in which, R¹¹ represents a C₁₋₆ alkyl, heterocyclic, C₁₋₆ alkyl-heterocyclic, heterocycle-C₁₋₆ alkyl, hydroxy C₁₋₆ alkyl, amino C₁₋₆ alkyl, C₁₋₆ alkylamino C₁₋₆ alkyl, di(C₁₋₆ alkyl)amino C₁₋₆ alkyl, trifluoromethyl, difluoromethyl, fluoromethyl, amino, C₁₋₆ alkylamino or di(C₁₋₆ alkyl)amino),

R¹¹ and R¹² may, taken together with a sulfur atom to which R¹¹ is attached and a nitrogen atom to which R¹² is attached, form a 5- or 6-membered aliphatic heterocycle, and

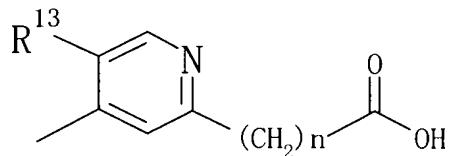
R¹³ represents a C₁₋₆ alkyl group, halogen atom or cyano group); an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 13 (Currently Amended): A compound according to Claim 1, wherein R¹ represents a 2,5-difluorophenyl or 2-fluoro-5-cyanophenyl group, R³ represents a 4-chlorophenyl, 4-fluorophenyl, 2,4-difluorophenyl, 3,4-difluorophenyl, 3-fluoro-4-chlorophenyl, 4-trifluoromethylphenyl, 5-chloro-2-thienyl, 5-chloro-2-pyridyl, 6-chloro-3-pyridyl, or 6-

trifluoromethyl-3-pyridyl group;

R² represents a group represented by the following formula:

{Chemical formula 7}



(wherein, wherein,

R¹³ represents a C₁₋₆ alkyl group, halogen atom or cyano group and n stands for an integer of from 0 to 6); an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 14 (Currently Amended): A medicament comprising, as an effective ingredient, a compound as claimed in ~~any one of Claims 1 to 13~~ Claim 1, an N-oxide or S-oxide thereof; a salt thereof; or a solvate thereof.

Claim 15 (Original): A medicament according to Claim 14, which is used for prevention or treatment of a disease resulting from abnormal production or secretion of β-amyloid protein.

Claim 16 (Original): A medicament according to Claim 15, wherein the disease resulting from abnormal production or secretion of β amyloid protein is Alzheimer disease or Down syndrome.

Claim 17 (Currently Amended): A pharmaceutical composition comprising a compound as claimed in ~~any one of Claims 1 to 13~~ Claim 1, an N-oxide or S oxide thereof, a salt thereof or a solvate thereof and a pharmaceutically acceptable carrier.

Claims 18-20 (Canceled):

Claim 21 (Currently Amended): A method of treating a disease resulting from abnormal production or secretion of β -amyloid protein, which comprises administering an effective amount of a compound as claimed in ~~any one of Claims 1 to 13~~ Claim 1, an N-oxide or S-oxide thereof, a salt thereof, or a solvate thereof.

Claim 22 (Currently Amended): A ~~treating~~ method according to Claim 21, wherein the disease resulting from abnormal production or secretion of β amyloid protein is Alzheimer disease or Down syndrome.

Claim 23 (New): A compound according to Claim 1, comprising at least one selected from the group consisting of:

5-Chloro-2-[(2,5-difluorophenyl-4-pyridylmethyl)thio]pyridine,
5-Chloro-2-[(2,5-difluorophenyl-4-pyridylmethyl)sulfonyl]pyridine,
2-Chloro-5-[(3-chloropyridin-4-yl)(2,5-difluorophenyl)methylthio]pyridine,
2-Chloro-5-[(3-chloropyridin-4-yl)(2,5-difluorophenyl)methylsulfonyl]pyridine,
5-[(3-Chloropyridin-4-yl)(2,5-difluorophenyl)methylsulfonyl]-2-fluoropyridine,
3,6-Dichloro-2-[(6-chloropyridin-3-ylthio)(pyridin-4-yl)methyl]pyridine,
3,6-Dichloro-2-[(6-chloropyridin-3-ylsulfonyl)(pyridin-4-yl)methyl]pyridine,
3,6-dichloro-2-[(6-chloropyridin-3-ylsulfinyl)(pyridin-4-yl)methyl]pyridine,
[5-Chloro-4-[(5-chloropyridin-2-ylsulfonyl)(2,5-difluorophenyl)methyl]pyridin-2-yl]amine,

N-[5-Chloro-4-[(5-chloropyridin-2-ylsulfonyl)(2,5-difluorophenyl)methyl]pyridin-2-yl]methanesulfonamide,
t-Butyl [5-chloro-4-[(6-chloropyridin-3-ylthio)(2,5-difluorophenyl)methyl]pyridin-2-yl]carbamate,

[5-Chloro-4-[(6-chloropyridin-3-ylsulfonyl)(2,5-difluorophenyl)methyl]pyridin-2-yl]amine, and

[5-Chloro-4-[(2,5-difluorophenyl)(6-trifluoromethylpyridin-3-ylsulfonyl)methyl]pyridin-2-yl]amine.